PATENT SPECIFICATION

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No. 3618/36.

COMPLETE SPECIFICATION.

Improvements relating to Seats for Automobiles

We, VAUXHALL MOTORS LIMITED, a British Company of Kimpton Road, Luton, Bedfordshire, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The invention relates to seats for automobiles.

It is particularly concerned with arrangements of seats and squabs by which passengers or alternatively luggage can be carried at will: in other words the rear seat and squab are disposable in either of two positions thereby enabling use of the rear body space for the accommodation of passengers or for the carrying of freight or luggage as may be required.

Various suggestions have been made for the provision of collapsible or folding seats particularly in connection with what are known as rumble or dickey seats; and most of them have involved the pivoting of the squab about its bottom edge and the seats about its front edge so that they can both be folded into a horizontal position to be substantially coplanar.

In seats according to the present invention, the scope of which is indicated in the appended claims, the seat is pivoted adjacent its forward edge and is tiltable to a vertical position, and the squab is pivoted adjacent its bottom edge and is tiltable to a horizontal position.

In a preferred arrangement, the present invention involves the seat cushion and the seat squab being mounted tiltably on pivotal supports and coupled by linkage which controls their tilting movement in unison and checks them in either position of adjustment.

In such an arrangement, to effect the changeover movement from seating position to freight or luggage carrying position, the back seat cushion is swung upward and forward and then downward to a vertical position on its pivot supports which are centred under the forward part of it, and the back seat squab is swung downward to horizontal position on its pivot supports which are centred behind its lower edge. Reverse movement of the seat cushion and squab restores them to the seating position.

Preferably the body space rearward of the back squab has a false floor and is enclosed frontally by the back squab when the squab is in the erect or seating position; the space is, however, accessible for the placing of luggage in it or for the removal of luggage from it through a rear door. In the luggage-carrying disposition, the back of the downtilted squab is in plane with this false floor, and the back of the tilted seat cushion forms a barrier which prevents the luggage from coming in contact with the back of the front seat squab.

The backs of the tiltable cushion and squab can be protected by wood or metal lathing or sheeting. Stowage space for tyres is available, if the body design permits, between a floor fixed on the chassis frame or forming the body bottom, and the false floor above-mentioned; this stowage space is accessible through a rear door in the body back. Shield wings can be fixed on the squab back near its side edges to protect the upholstery on the sides of the car body from injury by freight or luggage; these wings are secreted in the rear space when the parts are disposed for passenger carrying; when the parts are disposed for the carrying of luggage or freight they stand erect close to the side upholstery.

The various above-mentioned features will be apparent from the following more detailed description of one embodiment of the invention which is illustrated in the accompanying drawings.

In the drawings:—

Figure 1 is an interior view showing the rear seat cushion and squab in the seating position;

Figure 2 is a similar view showing those members in the luggage-carrying position; and

Figure 3 is a fragmentary perspective view of the same members in the seating position.

As shown in the drawings, the car body has a floor line A, and B is the rear part of the body with conventional air-flow back end C. A false floor D provides a tyre-stowing space E. An outwardly

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opening door (not shown) offers access to the space E. F is the front seat cushion and G the front seat squab.

H is a frame bar against which the back of the rear seat squab J rests when it is in the seating position, and K is a buckle latch for locking the squab J in that position.

The rear seat squab J is centred on pivots L fixed to the body frame at each side of the car and is tiltable on these pivots from the position shown in Figure 1 to the position shown in Figure 2 and vice versa. The rear seat cushion M can be moved about pivots N which are fixed to the body frame at each side of the car, and its back edge is supported on chocks O which are also fixed to the body frame at each side of the car.

A bracket P is fixed on each side edge of the squab J and a bracket Q is fixed on each side edge of the cushion M, and these brackets on the respective sides of the structure are connected by links R which are articulated to them by pivot pins S and T. It will be noted that the points of articulation S and T, connecting the links R and the seat and squab respectively, are away from the seat and squab with respect to the pivot supports N, L. In other words, seat M and pins T are on opposite sides of pivots N; and squab J and pins S are on opposite sides of pivots L. In the seating position (Figures 1 and 3) the brackets Q rest on the floor and support the front of the cushion M. A projecting stud U on the cushion back engages with a staple V on the squab back to lock the cushion in the upright position (Figure 2), and to support the forward edge of the squad J when the parts are arranged for the carrying of freight or baggage. A rear door W is provided for access from without to the freight or luggage space X (Figure 2).

The pivot centres L are appropriately positioned to align the back of the squab J level with the false floor D, when the squab is tilted down (Figure 2). The backs of the cushion M and squab J are preferably sheeted or slatted with wood or metal to protect them from injury by freight or baggage which may be carried in the space X. A countersunk hand grip Y is provided for facilitating lifting of the squab and restoring it to its upright position (Figures 1 and 3). Shield wings Z are fixed on the squab back at or near its side edges to provide protection for the side upholstery when the squab is set down as in Figure 2.

Automobiles with coupe bodies can be fitted with substantially the same arrangement. In this case the rear top part of the body is built low and designed to be swung backward in the usual way to open the rumble compartment, and the seat and and squab are tilted forward (as in Figure 2) to accommodate freight or baggage, or tilted back (as in Figure 1) to accommodate passengers.

The arrangement would be operative but not so satisfactory if the articulating link were omitted.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A seat fitment for an automobile, comprising in combination a seat pivotally supported adjacent its forward edge and tiltable forwardly to a vertical position, and a squab pivotally supported adjacent its bottom edge and tiltable forwardly and downwardly to a horizontal position.

2. A seat fitment for an automobile, comprising in combination a seat pivotally supported adjacent its forward edge and tiltable forwardly to a vertical position, and a squab pivotally supported adjacent its bottom edge and tiltable forwardly and downwardly to a horizontal position said seat and squab being connected in such a manner that said tilting movements are mutually interdependent.

3. A seat fitment for an automobile comprising in combination a seat pivotally supported adjacent its front edge and tiltable forwardly to a vertical position, a squab pivotally supported adjacent its bottom edge and tiltable forwardly and downwardly to a horizontal position, and an articulated linkage connected to the seat and squab or brackets thereon at points away from the seat and squab respectively with respect to the pivot supports.

4. A seat fitment according to claim 1, 2 or 3, including a stud or the like on the seat back and a staple or the like on the squab back, said stud and staple being engageable when the squab and seat are in the forwardly tiltable position.

5. A seat fitment according to any of claims 1 to 4 including a locking device adapted for detachably securing the upper part of the squab to the car frame.

6. A seat fitment according to any of claims 1 to 5 wherein the seat cushion when in its forwardly tilted position rests on the car floor and is held erect thereon by link articulations and by a stud and staple latch.

7. A rear seat fitment according to any of claims 1 to 6 in which the seat, when forwardly tilted, forms a partition which shields the back of the front squab.

8. A seat fitment according to any of

claims 1 to 7 characterised in that the squab when forwardly tilted is supported above the car floor rearwardly on its pivots and forwardly on a member which is fixed to the under side of the cushion.

9. A rear seat fitment for an automobile, comprising a squab tiltable forward on fixed pivots, means for supporting said squab when it is tilted forward to the horizontal position, a cushion tiltable forward to stand erect on its frontal edge, and means for locking the cushion in the erect position and supporting the forward part of the squab above floor level.

10. A seat fitment according to any of the preceding claims having protective shield wings at the side edges of the squab back.

11. In an automobile having a seat fitment according to any of the preceding claims, a false floor to the rear of the squab arranged so as to be substantially in the same plane as back of the squab when the same is in the forwardly tilted position.

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E. WILLIAMSON,
Chartered Patent Agent.

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Fig. 1.

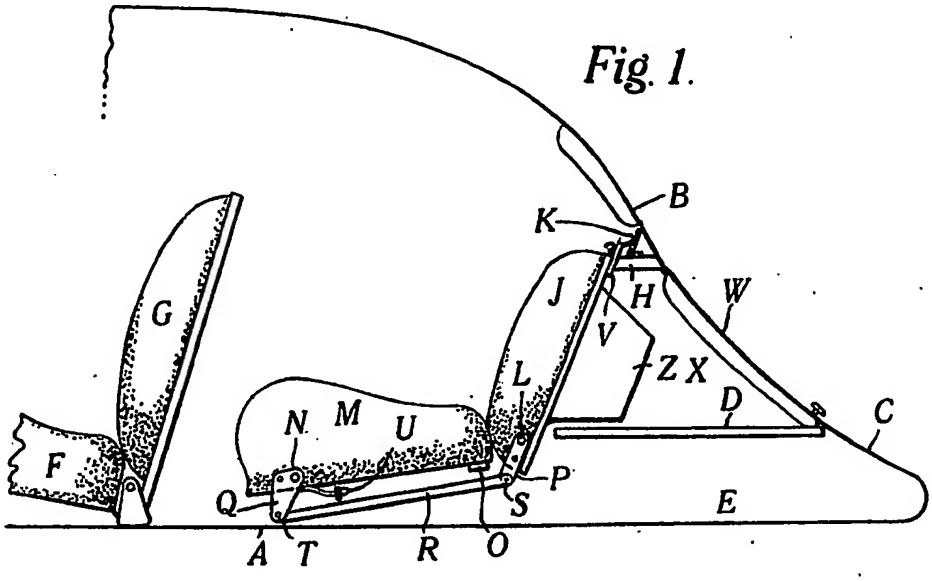


Fig. 2.

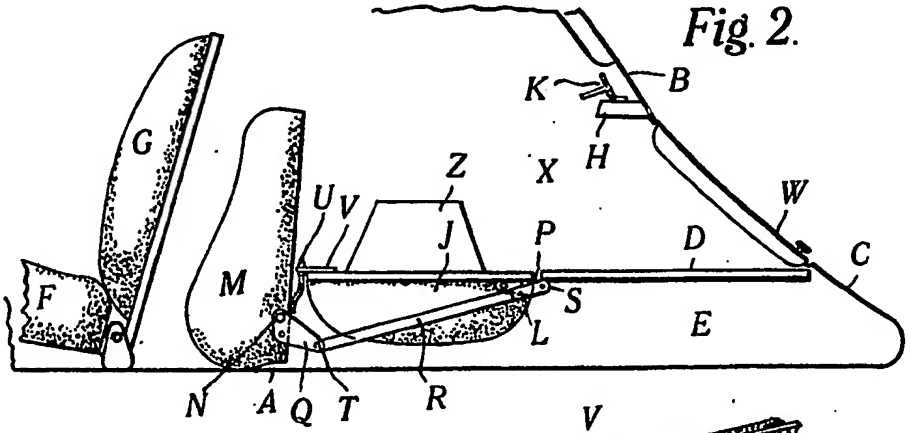
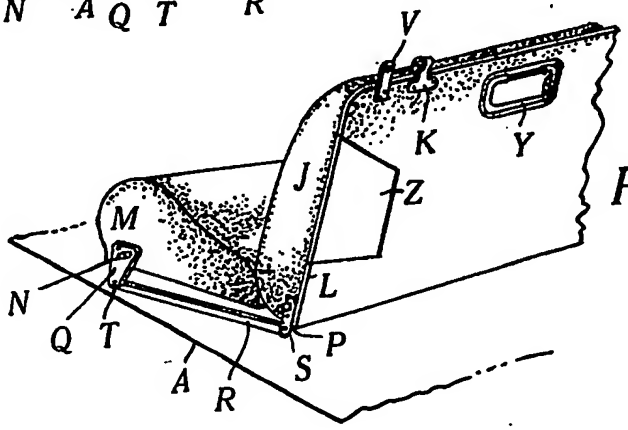


Fig. 3.



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